REMARKS

Initially, Applicants would like to express their appreciation to the Examiner for the detailed Official Action provided, for the indication that the drawings are acceptable, for the acknowledgment of Applicants' Claim for Priority and receipt of the certified copy of the priority document in the Official Action, and for the acknowledgment of Applicants' Information Disclosure Statement by return of the Form PTO-1449.

Applicants acknowledge with appreciation the indication that claims 2, 3, 5, 7, 8, 10 and 12 contain allowable subject matter, on page 7 of the Official Action. Applicants also acknowledge with appreciation the telephonic interview conducted on February 2, 2005, in which the Examiner informed Applicants' representative that these claims contain allowable subject matter.

Claims 1-13 are currently pending. Applicants respectfully request reconsideration and withdrawal of the outstanding rejections, and allowance of all the claims pending in the present application.

On pages 2 and 3 of the Official Action, claims 1 and 4 were rejected under 35 U.S.C. § 102(b) as being anticipated by TAKEUCHI et al. (U.S. Patent Application Publication No. 2002/0172132).

Applicants respectfully traverse the rejection of claims 1 and 4 under 35 U.S.C. § 102(b).

Applicants note that claim 1 recites, inter alia, "wherein, with regard to the light beam used for the second optical disc, an optical path difference generated between at least one of steps formed between adjacent annular zones of said plurality of annular zones within said outer area is lower by a predetermined amount than an integral multiple of the wavelength of the light beam used for the second optical disc."

Applicants submit that TAKEUCHI et al. (which is a publication of their own prior patent application) lacks any disclosure of an optical path difference generated between steps formed between adjacent annular zones within an outer area being *lower by a predetermined amount than an integral multiple of the wavelength* of the light beam used for the second optical disc.

As described in Paragraphs [0046] and [0047] of TAKEUCHI et al., the OPD between steps in the high NA exclusive area is *an integral multiple of the wavelength of a light beam used for DVD*. In this regard, as noted at line 4 of Paragraph [0047], the variable n in the equation $2\lambda(n-1)$ is a refractive index, not an integer. Applicants note that this equation demonstrates that the step is *an integral multiple of the wavelength*. Further, the Examiner appears to acknowledge that the OPD is λ or 2λ (i.e., *integral multiples of the wavelength*) in the embodiments depicted in Figs. 3A and 3B. However, Applicants submit that

differences of such a full wavelength, or wavelengths, are clearly not *lower by a predetermined amount than an integral multiple of the wavelength.* In other words, since the difference is a wavelength, it is clearly not lower than a wavelength.

Applicants further submit that claim 4, which is at least patentable due to its dependency from claim 1 for the reasons noted above, recites additional features of the invention and is also separately patentable over the prior art of record.

Accordingly, Applicants submit that the rejection of claims 1 and 4 under 35 U.S.C. § 102(b) is improper at least for each and certainly for all of the above reasons. Applicants respectfully request reconsideration and withdrawal of the rejection, and an early indication of the allowance of these claims.

On pages 5-7 of the Official Action, claims 11 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over TAKEUCHI et al. (U.S. Patent Application Publication No. 2002/0172132).

Applicants respectfully traverse the rejection of claims 11 and 13 under 35 U.S.C. § 103(a).

Applicants note that claim 11 recites, inter alia, "wherein a blazed wavelength in said outer area is lower by a predetermined amount than an integral multiple of the wavelength of the light beam used for the second optical disc."

Applicants submit that TAKEUCHI et al. (which is a publication of their own prior patent application) lacks any disclosure of a blazed wavelength in an outer area being *lower by a predetermined amount than an integral multiple of the wavelength* of the light beam used for the second optical disc.

As explained in detail above, the OPD between steps in the high NA exclusive area in TAKEUCHI et al. is an integral multiple of the wavelength of a light beam used for DVD, and not lower by a predetermined amount than an integral multiple of the wavelength. Accordingly, it is clear that the blazed wavelength is also an integral multiple of the wavelength of a light beam used for DVD, and not *lower by a predetermined amount than an integral multiple of the wavelength.* In this regard, Applicants note that α is not a constant in TAKEUCHI et al., as contended by the Examiner on page 6 of the Official Action, but is clearly a function, as described in Paragraph [0048]. Applicants further submit that TAKEUCHI et al. does not suggest a blazed wavelength lower by a predetermined amount than an integral multiple of the wavelength, as contended by the Examiner, and that providing such a blazed wavelength in the system of TAKEUCHI et al. would not have been obvious to one of ordinary skill in the art. Rather, Applicants submit that such a modification would destroy the teachings of TAKEUCHI et al. itself regarding use of a blazed wavelength of a full wavelength, or integral multiple of a wavelength. Applicants submit that such a modification is clearly the result of impermissible hindsight reasoning, based upon the

disclosure of the present application, rather than upon any teachings in the applied reference.

Applicants further submit that claim 13, which is at least patentable due to its dependency from claim 11 for the reasons noted above, recites additional features of the invention and is also separately patentable over the prior art of record.

Accordingly, Applicants submit that the rejection of claims 11 and 13 under 35 U.S.C. § 103(a) is improper at least for each and certainly for all of the above reasons. Applicants respectfully request reconsideration and withdrawal of the rejection, and an early indication of the allowance of these claims.

On pages 4 and 5 of the Official Action, claims 6 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over TAKEUCHI et al. (U.S. Patent Application Publication No. 2002/0172132) in view of ARAI et al. (EPO 1102251).

Applicants respectfully traverse the rejection of claims 6 and 9 under 35 U.S.C. § 103(a).

Applicants note that claim 6 recites, inter alia, "wherein, with regard to the light beam used for the second optical disc, a phase shift amount generated by at least a pair of adjacent annular zones within said outer area is lower by a predetermined amount than an integral multiple of 2π."

Applicants submit that TAKEUCHI et al. (which is a publication of their own prior patent application) lacks any disclosure of a phase shift amount generated by adjacent

annular zones within said outer area (with regard to the light beam used for the second optical disc) being *lower by a predetermined amount than an integral multiple of 2 π.*

As explained in detail above, the OPD between steps in the high NA exclusive area in TAKEUCHI et al. is an integral multiple of the wavelength of a light beam used for DVD, and not lower by a predetermined amount than an integral multiple of the wavelength. Accordingly, it is clear that the a phase shift amount generated by adjacent annular zones would be an integral multiple of 2π, and not *lower by a predetermined amount than an integral multiple of 2 π.* Further, Applicants submit that the expressions ΦB and Φb in ARAI et al. define the "pitch" of the ring-shaped bands (i.e., length) and not the size of the steps between bands (i.e., height) (See Paragraphs [0277] and [0278]). Accordingly, Applicants submit that ARAI et al. does not disclose or teach a phase shift amount generated by adjacent annular zones being lower by a predetermined amount than an integral multiple of 2π, as contended by the Examiner. Applicants further submit that providing such a phase shift in the system of TAKEUCHI et al. would not have been obvious to one of ordinary skill in the art. Rather, Applicants submit that such a modification would destroy the teachings of TAKEUCHI et al. itself regarding use of a 2π phase shift, or an integral multiple of 2π phase shift. Applicants submit that such a modification is clearly the result of impermissible hindsight reasoning, based upon the disclosure of the present application, rather than upon any teachings in ARAI et al.

Applicants further submit that claim 9, which is at least patentable due to its dependency from claim 6 for the reasons noted above, recites additional features of the invention and is also separately patentable over the prior art of record.

Accordingly, Applicants submit that the rejection of claims 6 and 9 under 35 U.S.C. § 103(a) is improper at least for each and certainly for all of the above reasons. Applicants respectfully request reconsideration and withdrawal of the rejection, and an early indication of the allowance of these claims.

COMMENTS ON REASONS FOR ALLOWANCE

In regard to the Examiner's indication of allowable subject matter in claims 2, 3, 5, 7, 8, 10 and 12 on page 7 of the Official Action, Applicants do not disagree with the Examiner's indication that the prior art fails to disclose or teach various features of these claims. However, Applicants wish to make clear that the claims in the present application recite a combination of features, and that the patentability of these claims is also based on the totality of the features recited therein, which define over the prior art. Thus the reasons for allowance should not be limited to those mentioned by the Examiner.

P24443.A03

SUMMARY AND CONCLUSION

Consideration of the current remarks, reconsideration of the outstanding Official Action, and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate.

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

Should there be any questions or comments, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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